

SURGICAL CORRECTION OF RECTAL DIVERTICULUM WITH PERINEAL HERNIA IN A DOG

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Introduction

Repeated pushing against wall of rectum by faeces makes the former weak and stretched causing bulge and pocket formation which ultimately turns into sacculated larger diverticulum (assymmetric enlargement of rectal diameter and disruption of muscularis layer of rectum followed by protrusion of rectal mucosa through seromuscular layer of rectal wall). It occurs in male dogs over 6 years of Age (Horney and Archibald, 1974). Sometimes these are complicated with concurrence of perineal hernia called “Rectal diverticulum perineal hernia complex”. This report describes the techniques for surgical correction of one such clinical case.

Case Reports and Observation

One 8 years old male German Spitz Dog with huge right unilateral perineal swelling and history of dyschezia, tenesmus

since last 2 months was presented. The animal with faecal incontinence was anyhow mentained by local veterinarian with supportive fluid and laxative for the above period. A per-rectal digital examination revealed impacted faecal mass in a unilateral diverticulum (Fig. 1). When the faeces was removed slowly from caudal pouch of rectum the perineal region reduced from outside. The prostatic enlargement was eliminated by history and physical examination. On urethral catheterization removal of urine, reduction of perineal swelling and palpation of hernial ring confirmed unilateral right perineal hernia and was opted for surgical correction on 3rd day as hematological and biochemical parameters checked on second day were within normal limit.



Fig. 1 : Right unilateral rectal diverticulum with perianal hernia

Surgical Correction

Rectal pleating technique with hernia repair was followed. After proper preparation a combination of intramuscular Atropine Sulphate (0.044 mg/kg), Xylaxine Hcl (1.5 mg/kg) and Ketamine Hcl (4 mg/kg) were administered at 5 and 10 minutes interval, respectively, followed by slow intravenous administration of diazepam @ 0.4 mg/kg body

weight. Anal sac was evacuated and purse

string suture were placed around the anus. A curvilinear skin incision was made 1.5cm lateral to the anus, beginning at the base of the tail and extending 2cm ventral to the ischium (Fig.2). The hernial sac content was replaced into the abdomen. One assistant inserted his index finger through the rectum and deviated the dilated part through the

operation site to see the ruptured muscular layer. The size of rectal diverticulum was reduced by placing 8 interrupted Lambert pattern by 2-0 synthetic absorbable suture to the seromuscular layer parallel to the rectal direction through the affected part until the lumen diameter became same as of cranial normal part (Fig.3). Then standard technique following Westhus and Burge for perineal hernia repair suturing the internal obturator



Fig. 2 : Right perianal approach



Fig. 3 : Longitudinal pleating with Lambert suture

Discussion

“Rectal diverticulum / Perineal hernia complex” were reported by Szabo and Bilkai (2001), Vnuk *et al* (2006) and Pekcan *et al* (2010). They described plication or pleating or reverse U technique for rectal correction. In case of bilateral rectal diverticulum without perineal hernia “rectal pull-through technique” followed by resection and reposition in anal approach is practised (Hedlund, 2002, Maji, *et al*, 2012). Similar case was reported by Basavanagowda *et al* in 2010. Castration was not decided here as prostrate size was normal. Regular deworming and laxative diet proved well with weight gain and normal appetite to good health with no report of recurrence up to 1.5 years post-operation in this dog.

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muscle with external anal sphincter medially and sacrotuberous ligament, the coccygeus muscle and levator ani laterally with 1-0 synthetic absorbable suture followed by skin suture. The post-operative Ceftriaxone with Tazobactam and Metronidazole @ 20 mg/kg and 25 mg/kg, respectively along with laxative diets were used. The animals recovered uneventfully with formed stool defecation and regained their normal appetite.

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